

ADDITIONAL INVESTIGATION
WORK PLAN
FOR PHASE II/IV-A REMEDIAL ACTION PLAN
FOR THE FIRE TRAINING AREA

INSTALLATION RESTORATION PROGRAM
FOR SUFFOLK COUNTY AIRPORT
AIR NATIONAL GUARD BASE
WESTHAMPTON BEACH, LONG ISLAND, NEW YORK

Submitted to:

MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE
U.S. DEPARTMENT OF ENERGY

Submitted by:

E.C. JORDAN CO.
PORTLAND, MAINE

Job No. 5096-08

NOVEMBER 1988



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WORK PLAN

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WORK PLAN

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1.0 INTRODUCTION

The Department of Defense initiated a program for additional investigation at the Suffolk County Airport Fire Training Area (FTA). The focus of this additional work is to address the presence of 2-butanone (i.e., methylethyl ketone or MEK) in groundwater upgradient and downgradient of the FTA. E.C. Jordan Co. (Jordan), through a subcontract with Martin Marietta Energy Systems, Inc., was asked to perform this additional investigation.

During the site characterization program conducted in 1987, Jordan installed monitoring wells in the FTA vicinity and sampled groundwater from those wells. Results of the groundwater sampling and chemical analysis show the presence of MEK above 1 part per million (ppm) in wells both upgradient and downgradient of the FTA. Although other contaminants were found in the groundwater, they were present at very low levels and are not expected to present a significant risk to public health or the environment. Because of the MEK contamination in groundwater, Jordan will perform additional investigation for the FTA.

2.0 TECHNICAL APPROACH

During the additional investigation, Jordan will evaluate activities at the airport that may have contributed to the groundwater contamination detected at the FTA. The investigation will consist of the following four major tasks:

- Task 1: a records search and site walkover to investigate possible solvent use and disposal practices
- Tasks 2 and 4: groundwater sampling and analysis for existing and new wells
- Task 3: installation of four additional monitoring wells upgradient of the FTA
- Task 5: preparation of an addendum report

These four tasks are described in the following subsections.

2.1 Task 1 - Records Search

Analytical results of the groundwater samples collected during the Phase II/IV-A investigation indicated that two monitoring wells installed in the FTA area contained detectable MEK concentrations. The source of the MEK is not known. Available data suggest its origin may be associated with areas upgradient of the FTA. Further, available information suggests that the MEK is unrelated to past Air National Guard (ANG) activities at the FTA. As a result, the first task of the supplemental program is to review available ANG and Suffolk County Airport records in an effort to identify past and present uses of MEK and related disposal practices at the airport.

Records at both the Air National Guard Base (ANGB) and the Suffolk County Airport will be reviewed for information that might indicate the potential use of MEK by ANG operations and/or nonmilitary tenants in the past five years. Given the distance between the FTA and the affected downgradient monitoring well, and the approximate groundwater velocity, it would appear that the dumping near the FTA would have occurred within the past five years, which is the basis for a five-year records search. The following three subtasks were established to ascertain the use of MEK at the Suffolk County Airport.

2.1.1 Task 1.1. ANGB records related to the use of solvents (particularly MEK) for the past five years will be reviewed. Possible areas of concern include the vehicle maintenance, ice removal, and painting areas. Methods of solvent use and disposal will be reviewed with attention given to potential impact of the groundwater downgradient of the FTA.

2.1.2 Task 1.2. A similar review of records at the Suffolk County Airport will be conducted to inventory operations, other than the ANG, that might have or continue to use and/or dispose of solvents, particularly MEK, at the airport. Leases documenting operations during the past five years will be reviewed to identify operators who handled or disposed of solvents. Once these operations are identified, disposal methods for spent solvents will be determined.

2.1.3 Task 1.3. A site walkover will be conducted in the FTA vicinity to identify locations of potential solvent/MEK disposal. This walkover will start with a review of aerial photographs and airport underground utility maps. Suspect areas on the photographs will be field-checked. Signs of dead and/or stressed vegetation or obvious soil staining will be marked and field-checked. After Jordan personnel complete the records search, the walkover will be conducted to evaluate MEK use/disposal identified from the records review.

2.2 Task 2 - Groundwater Sampling (Round 1)

Groundwater samples from all existing wells will be collected and analyzed for volatile organic compounds (VOCs). The wells to be sampled include the monitoring wells recently installed during the Phase II/IV-A site characterization investigation, as well as the unsecured PVC monitoring wells installed previously (Table 1).

The purpose of the sampling is to ascertain contaminant levels in wells where MEK was found during the site characterization sampling (summer 1987). In addition, sampling the unsecured wells will assist in evaluating possible use of those wells as disposal points for solvents.

Before sampling, water levels will be measured to the nearest 0.01 foot and each well will be purged to three well volumes. Samples will be collected in decontaminated Teflon or stainless steel bailers. Samples will be split (if split samples are required, containers for those samples will be supplied by the agency splitting samples) and transferred directly to appropriate, clearly labeled containers, preserved in the field (as appropriate), packed in coolers with ice, sealed, and shipped via overnight courier to the laboratory for analysis. Field analysis for pH, temperature, and specific conductance will be

TABLE 1

GROUNDWATER SAMPLING PROGRAM
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

MONITORING WELL SAMPLES ¹	ROUND 1	ROUND 2
Existing Unsecured Wells	8	
Existing Jordan Wells	10	10
Existing Jordan Piezometers	4	4
New Jordan Wells	—	<u>4</u>
Total Groundwater Samples	22	18
Field Duplicates ²	3	2
Sampler Blanks ³	3	2
Trip Blanks ⁴	4	4
MS/MSD ⁵	3	2
HAZWRAP ⁶	<u>3</u>	<u>2</u>
Total QA/QC Samples	16	12
Combined Total	38	30

NOTES:

¹ All samples to be analyzed for VOCs.² Field Duplicates at 10%.³ Sampler Blanks at 10%.⁴ Trip Blanks one for every day of sampling.⁵ MS/MSD at 10%.⁶ HAZWRAP at 10%.11.88.61T
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performed and the results recorded. Samples will be analyzed for Target Compound List (TCL) VOCs according to Contract Laboratory Program (CLP) procedures.

2.3 Task 3 - Additional Field Investigation

An additional field investigation program is scheduled to be initiated after the records search program results are assessed. Information gathered during the records search will be used to identify possible locations for the installation of the supplemental upgradient monitoring wells (Figure 1). The supplemental monitoring wells will be installed as two well pairs. Hollow-stem augers will be used to advance the borings to the desired depth for monitoring well installation. One soil sample will be collected above the water table for each well pair (two samples total) and analyzed for VOCs. The deep wells are anticipated to be located at a depth of about 100 feet below the ground surface, and the shallow monitoring wells at a depth of about 40 feet, with the screened section of the well straddling the groundwater surface.

The wells will be constructed using National Sanitation Foundation-Approved, Schedule 80 polyvinyl chloride (PVC) and 2-inch ID casing with flush-threaded joints. Well screens will be constructed of Schedule 80 PVC with 0.010-inch slot sizes. The monitoring wells will be installed as described in the Work Plan for the site characterization study. Figure 2 shows a typical well construction.

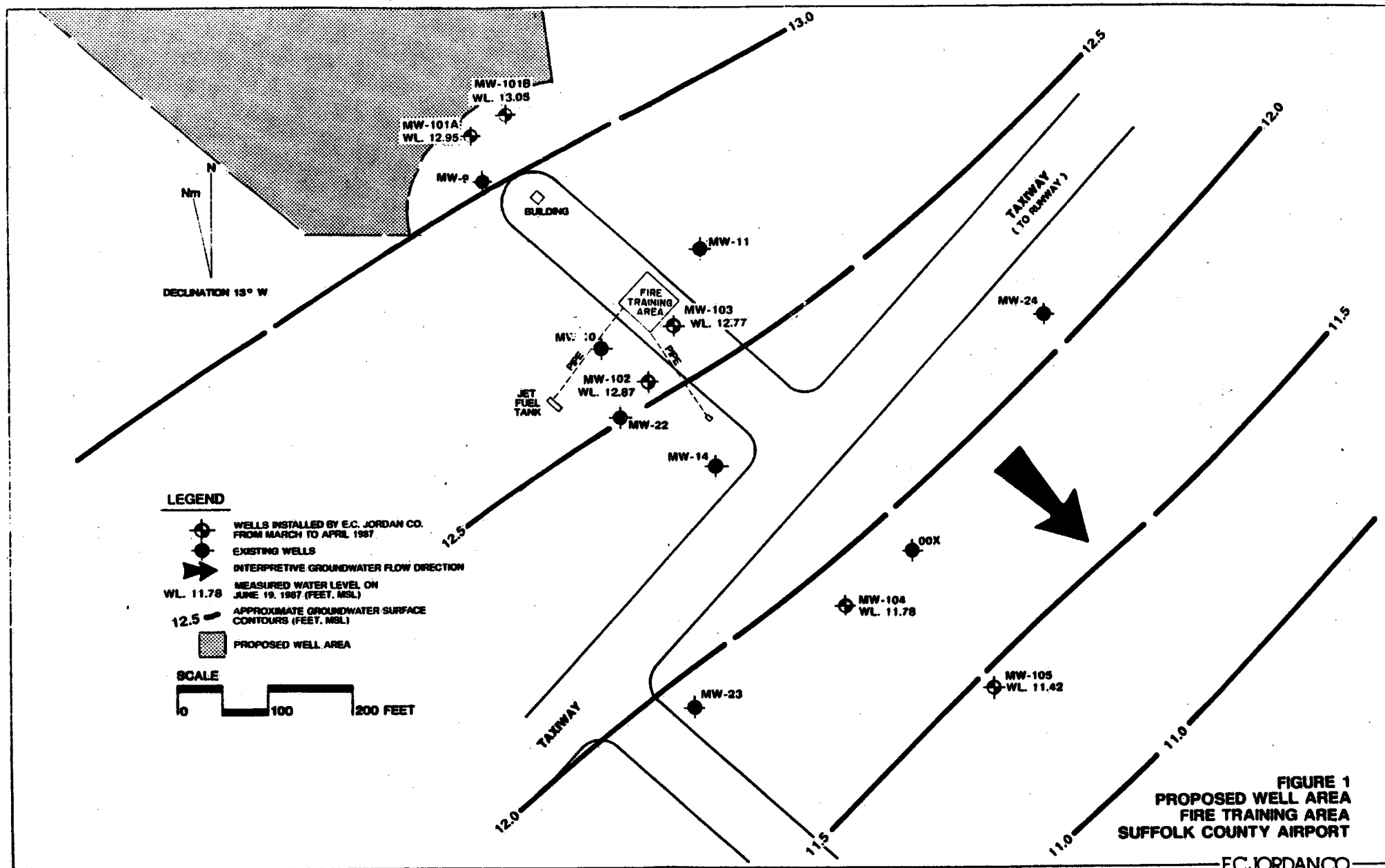
Once the monitoring wells are installed, a steel protective casing will be installed at the surface. The monitoring well will then be developed to provide representative samples of the groundwater regime. Rising-head permeability tests will also be conducted on each well using the same compressed air method as in the site characterization investigation.

2.4 Task 4 - Groundwater Well Sampling (Round 2)

Once the monitoring wells have been allowed to equilibrate (i.e., no sooner than two weeks after development of the new wells), they will be sampled and the groundwater will be analyzed for VOCs. The four new wells and the wells and piezometers installed during the site characterization investigation will be sampled (a total of 18 wells). Analytical results from both rounds of groundwater sampling and the soil samples collected during the additional field investigation will be validated to ensure analytical precision and accuracy. Validation will be performed before the analytical results are used for site characterization.

2.5 Task 5 - Addendum Report

Results of the records search, supplemental field investigation, and both sets of groundwater sampling events will be presented as an Addendum to the 1987 Site Characterization Report. The addendum will include figures and/or tables modified as a result of new information obtained, and will identify whether initial interpretations regarding site characterization need to be revised.



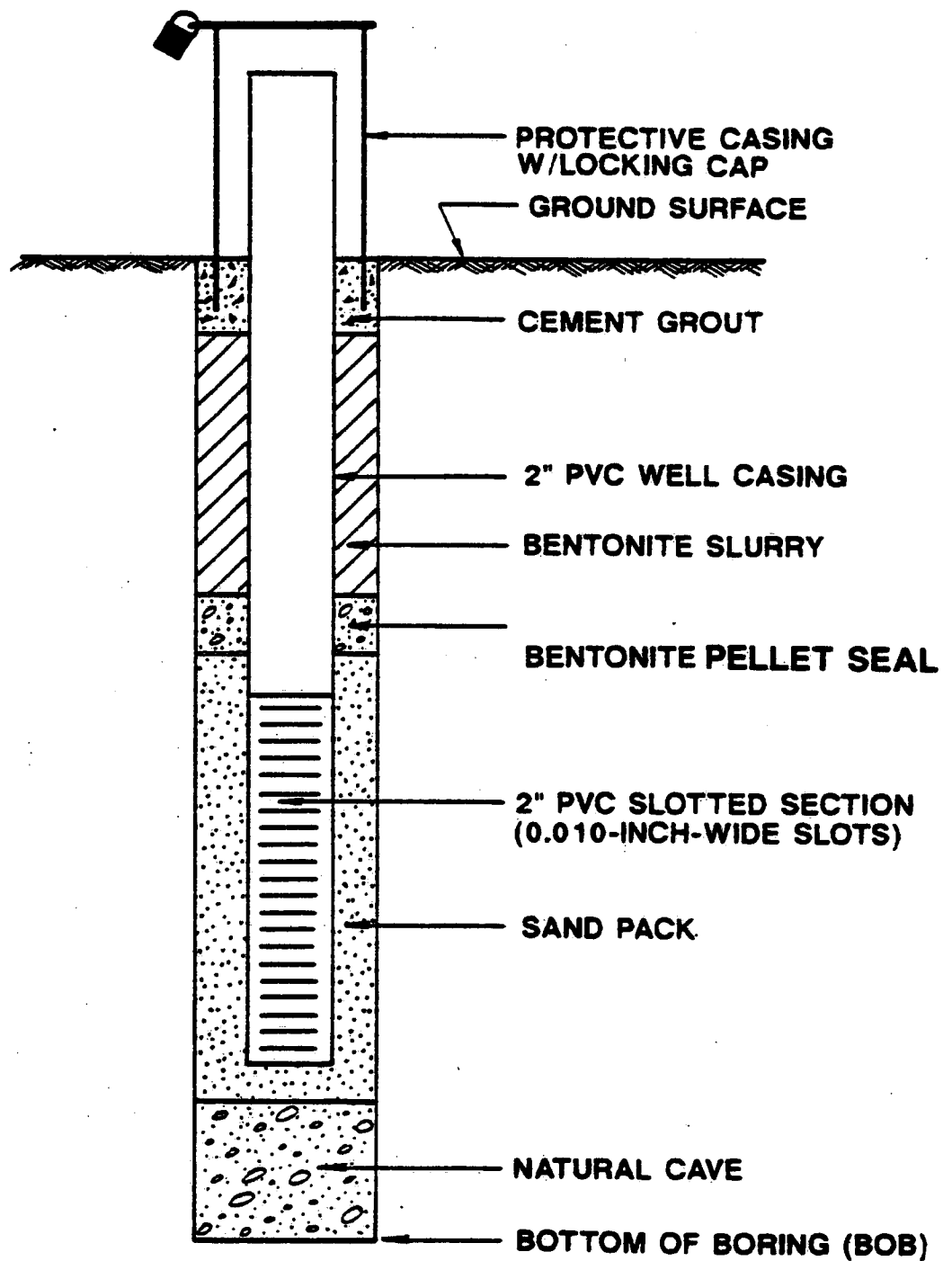


FIGURE 2
TYPICAL MONITORING WELL INSTALLATION DETAIL
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

Draft Report Review Meeting. The addendum to the report will be discussed at an internal ANG/Air Force meeting scheduled four weeks after submittal of the draft report. Comments received during the course of this meeting will be considered (as appropriate) in preparation of the revised addendum to be issued to the regulatory agencies.

Final Presentation Meeting. Six weeks after release of the report, a meeting with the regulatory agencies will be held to review their comments regarding the addendum to the report. The investigation and results will be discussed along with any new conclusions from the additional investigation.

3.0 SCHEDULE

The work items described in Amendment 4 are expected to be completed within 48 weeks of notice to proceed. The work will follow the schedule outlined in the bar graph in Figure 3. Much of the scheduled time for completion represents periods for laboratory turnaround of analytical data and review time by the ANG for the draft and final reports.

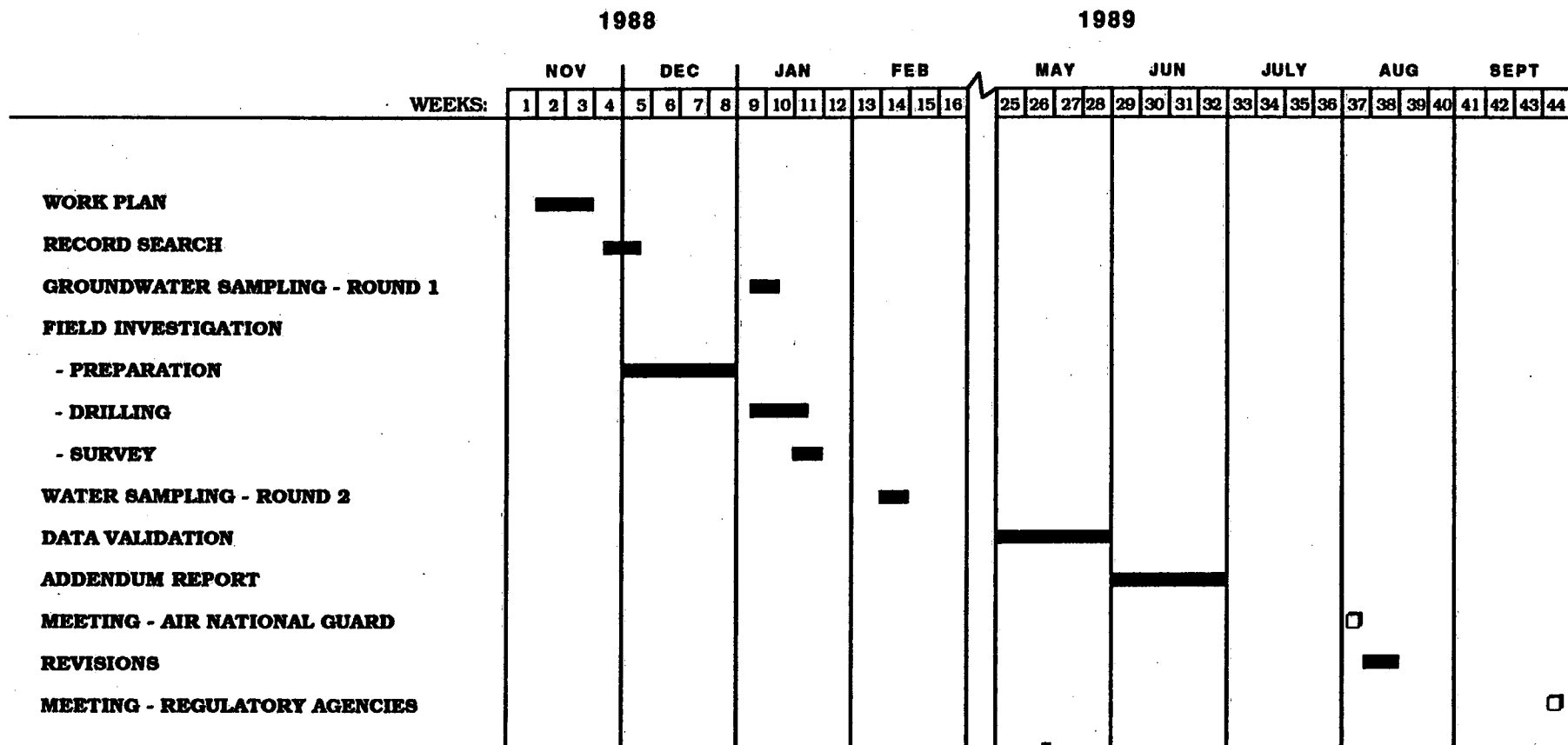


FIGURE 3
SCHEDULE FOR ADDITIONAL INVESTIGATION
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT
NATIONAL GUARD BASE

APPENDIX A

REVISED SUMMARY SITE SAFETY PLAN

E.C. JORDAN CO.
SUMMARY SITE SAFETY PLAN

A. GENERAL INFORMATION

SITE: Suffolk County Airport Fire Training Area

SITE OWNER/CONTACT: Suffolk County Department of Aviation

Major Gerald Harris - Air National Guard

LOCATION: Suffolk County Airport, Westhampton Beach, N.Y.

PLAN PREPARED BY: P. Bolmer DATE: 11/4/88

APPROVED BY: Cindy Sundquist DATE: 11/29/88

OBJECTIVE(S): To maintain a safe work environment and to protect the health of on-site personnel.

PROPOSED DATE(S) OF
INVESTIGATION: December 1986 - January 1987

BACKGROUND REVIEW: Complete: X Preliminary:

OVERALL HAZARD: Serious: Moderate: Low: X Unknown:

B. SITE/WASTE CHARACTERISTICS

WASTE TYPES: Liquid X Solid Sludge Gas

CHARACTERISTICS: Corrosive Ignitable X Radioactive

Volatile X Toxic X Reactive Unknown

SITE DESCRIPTION: The Suffolk County Airport Fire Training Area (FTA) is located on a dispersed parking hardstand next to the Northeast-Southwest runway of the Suffolk County Airport. The FTA was used by the Air Force at least as early as 1961 and more recently experienced shared use by the Air National Guard and local fire departments. Flammable liquids were placed on the ground or concrete hardstand and ignited, and the fire was extinguished during the fire training.

The uppermost geological layer at the site is "mostly outwash deposits of coarse and fine sand and gravel." This layer is about 120 feet thick at the airport. The layer is extremely permeable; at least 10^{-3} cm/sec. A more impermeable layer (Gardiner's Clay) underlies the upper layer.

C. HAZARD EVALUATION

During operation of the FTA by the Air Force (prior to 1970), various waste flammable liquids were used, which probably included waste oils, solvents (e.g., kerosene, mineral spirits, trichloroethylene, MEK, and toluene), and jet fuels. Since 1971, the Air National Guard has used only jet fuel (JP-4) at the FTA. Jet fuel is composed of several organic constituents considered toxic or hazardous, including naphthalene, benzene, ethylbenzene, toluene, xylene, and other alkylbenzenes.

Nine monitoring wells were installed around the FTA. Sampling of these wells indicates that low levels of volatile organic compounds (except MEK) are in the groundwater under and downgradient of the site.

Chemicals that may be found on-site and their chemical toxicity are listed in Table A-1.

D. SITE SAFETY PROCEDURES

Map/Sketch Attached? yes (Figure A-1) Site Secured? no

Perimeter Identified? yes Zone(s) of Contamination Identified? yes

Perimeter Establishment: The Suffolk County Airport is surrounded by a chainlink fence.

PERSONNEL PROTECTION: All site activities will be Level D with the ability to upgrade to Level C if PI meter readings are steadily above background (between 1-5 ppm) in the breathing zone (Table A-2).

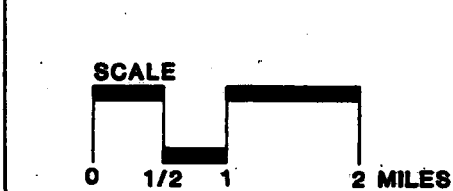
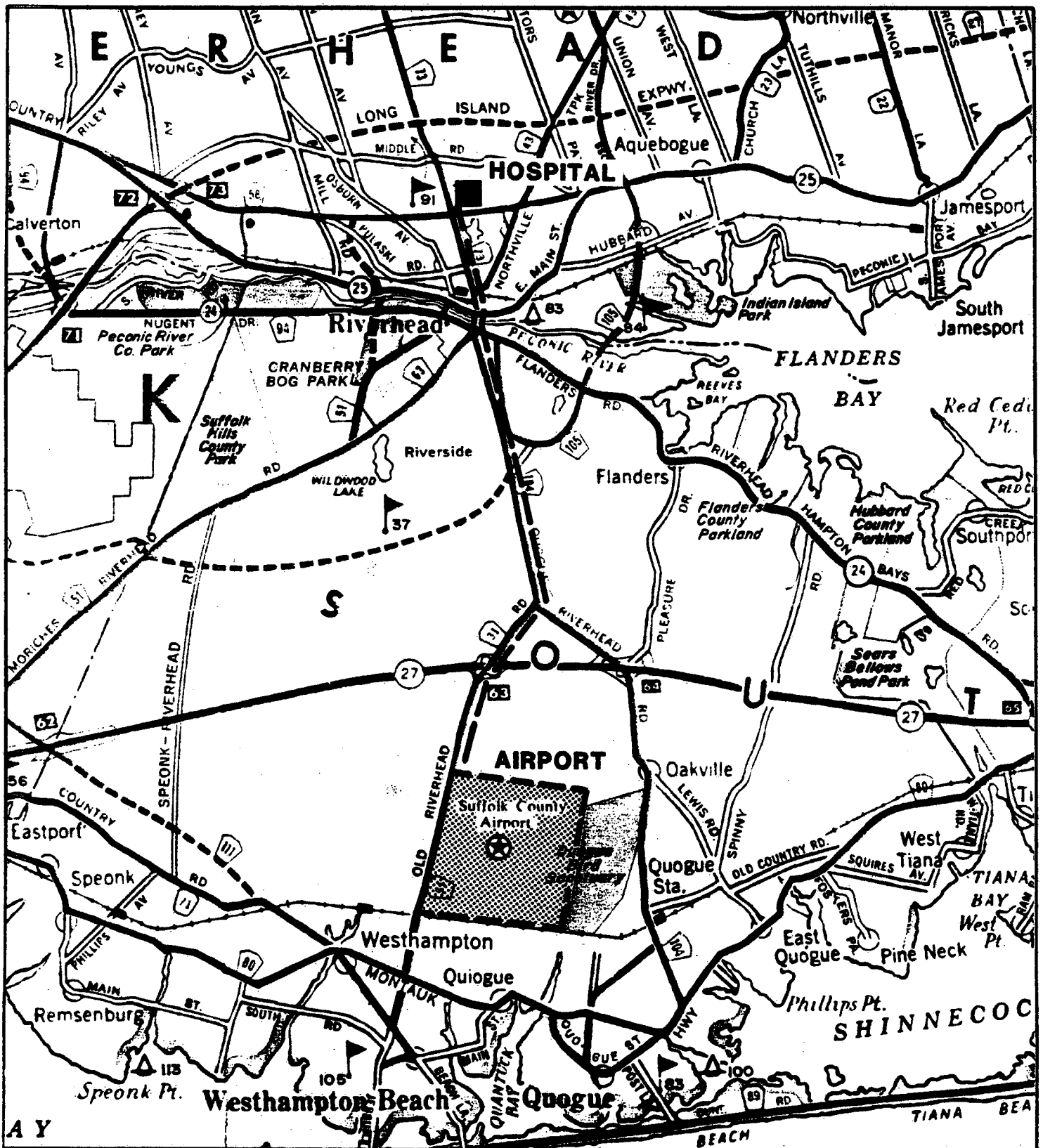
SITE MONITORING EQUIPMENT:

- photoionization meter
- oxygen deficiency meter
- explosimeter
- organic vapor analyzer

DECONTAMINATION PROCEDURES:

Personnel: Because most of the site work is anticipated at Level D, decontamination will consist of removing coveralls and leaving them on-site. If disposable protective clothing is used (e.g., Level C), the clothing will be placed in a 55-gallon drum at the end of each shift.

Equipment: Equipment decontamination will be performed according to the Jordan Health and Safety Plan (Table A-3). Highlights of specific decontamination procedures to be used are as follows:



**ROUTE TO HOSPITAL
FIGURE A-1
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT**

EC.JORDANCO

TABLE A-1

CHEMICAL TOXICITY AND OTHER RELATED INFORMATION
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

CHEMICAL	TLV (ppm)	APPROXIMATE ODOR THRESHOLD (ppm)	PHYSICAL CHARACTERISTICS	DERMAL TOXICITY	REMARKS
Benzene	10		colorless liquid with aromatic odor	local systemic	<p>Poisoning occurs most commonly through inhalation; also penetrates through skin.</p> <p>Symptoms: irritates eyes, nose, respiratory system; giddiness; headache; nausea; staggered gait; fatigue; depression; abdominal pain</p> <p>Target organs: blood, CNS, skin, bone marrow, eyes, respiratory system</p> <p><u>First Aid:</u> Swallow: NO VOMIT Skin: soap wash</p> <p>Incompatibilities: strong oxidizers, chlorine, bromine with iron. Dangerous when exposed to heat or flame.</p>
Trichloroethylene (TCE)	50	50	colorless liquid sweet odor		<p>Symptoms: headache, vertigo, vision distortion, tremors, somnolence, nausea, vomiting, irritates eyes, cardiac arrhythmias, parestesias</p> <p>Target organs: respiratory system, heart, liver kidneys, CNS, skin</p> <p><u>First Aid:</u> Swallow: Ipecac, vomit Skin: soap wash immediately</p> <p>Incompatibilities: strong caustics; chemically active metals: Ba, Li, Na, Mg, liquid O₂, Al, O₂, KNO₃, Ti.</p>
methylethyl ketone (2-Butanone) (MEK)	200		colorless, clear liquid with a fragrant mint-like odor		<p>Symptoms: Irritates eyes, nose, headache, dizziness, vomit</p> <p>Target organs: CNS, lungs</p> <p><u>First Aid:</u> Swallow: Ipecac, vomit Skin: water wash immediately</p>
Ethyl Benzene	100		colorless liquid with aromatic odor	local systemic	<p>Symptoms: irritant to eyes and mucous membranes, headache, narcotic</p> <p>Target organs: eyes, upper respiratory system</p> <p><u>First Aid:</u> NO VOMIT</p> <p>Incompatibilities: oxidizing materials; dangerous when exposed to heat or flame.</p>

TABLE A-1 (cont.)

CHEMICAL TOXICITY AND OTHER RELATED INFORMATION
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

CHEMICAL	TLV (ppm)	APPROXIMATE ODOR THRESHOLD (ppm)	PHYSICAL CHARACTERISTICS	DERMAL TOXICITY	REMARKS
Xylene	100		liquid colorless, aromatic odor	local systemic	Symptoms: dizziness; excitement; drowsiness; incoordination; staggering gait; irritates eyes, nose, and throat; corneal vacuolization; nausea; vomiting; abdominal pain Target organs: CNS, eyes, GI tract, blood, liver, kidneys, skin <u>First Aid:</u> Swallow: NO VOMIT Skin: soap wash Incompatibilities: strong oxidizers; dangerous when exposed to heat or open flame.
Toluene	100		liquid	local systemic	Symptoms: fatigue, confusion, euphoria, dizziness, headache, dilated pupils, lack of appetite, nervousness, insomnia Target organs: CNS, liver, kidneys, skin <u>First Aid:</u> Swallow: NO VOMIT Skin: soap wash Incompatibilities: strong oxidizers
Naphthalene	10	.01	mothball odor	local systemic	Poisoning may occur through ingestion of large doses, inhalation, or skin adsorption.
Kerosene (Mineral oil)			pale yellow to water white oily liquid		Inhalation of high concentrations of vapors can cause headache, stupor. Ingestion causes irritation of the stomach with nausea and vomiting.
Mineral Spirits (petroleum spirits)			volatile clear colorless liquid		Ingestion can cause burning sensation, vomiting, drowsiness, diarrhea. Inhalation of concentrated vapors causes intoxication like alcohol.
Lead	.15		bluish-white or silvery gray solid		Lead is a cumulative poison. Increasing amount builds up in the body and eventually a point may be reached where symptoms and disability occur. Symptoms: (Long-term exposure) decreased physical fitness, fatigue, sleep disturbances, headache, aching bones, constipation, decreased appetite, and abdominal pain. Inhalation of large amounts of lead may lead to seizures, coma, and death. Target organs: GI, CNS, kidneys, blood, gingival tissue.

TABLE A-2

**PERSONNEL SAFETY EQUIPMENT CHECKLIST
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT**

QUANTITY REQUIRED	PROTECTIVE AND SAFETY EQUIPMENT	MODEL OR MATERIAL
	SCBA	MSA 401
	Spare Cylinders	
	Escape Mask	ELSA
1 pp	Full Face Respirator	
1 pp	Cartridge	
1 pp	Hardhat w/Face Shield	
1 pp	Safety Glasses*	
	Ear Protection	
2 ppd	Gloves, inner*	surgical
2 ppd	Gloves, outer*	nitrile
	Chemical-Resistant Coveralls	
	Disposable Coveralls	Coated Tyvek
	Splash Aprons	Vinyl
1 pp	Boots*: Safety Boots	
	Fully Encapsulated Suits	
1 pp	Dosimeters*	TLD
	First Aid Equipment	
1	Utility First Aid Kit*	
	Industrial First Aid Kit	
	Stretcher	
	Oxygen	
1	Eye Wash Station*	Portable
	Emergency Shower	
1	Fire Extinguisher*	CO ₂
	Safety Harness	
	Emergency Tools	
	Other	
5	duct tape (rolls)	

* - Mandatory

pp - per person

ppd - per person per day

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TABLE A-3

DECONTAMINATION EQUIPMENT/MATERIALS
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

QUANTITY	TYPE	REMARKS
4	wash tubs	
1	steam sprayer	
4	scrub brushes	
	containers	
1	protective clothing	55-gallon drum
1	soil cuttings	55-gallon drum
1 box	detergent	
6 gallons	methylyhydrate	
85 gallons	deionized water	
1 box	disposable wipes	
	plastic wrap	
	Ziploc bags	

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- o Drill rigs will be steam-cleaned prior to being used on-site and before leaving the site.
- o All downhole tools will be steam-cleaned between borings.
- o Split spoons will be cleaned immediately after they are used. This will be accomplished by washing with soapy water, rinsing in potable water, followed by a methylhydrate (denatured alcohol, see Attachment) rinse, and finally a distilled water rinse.
- o Other sampling equipment, unless badly soiled, will be decontaminated by rinsing with isopropyl alcohol followed by a distilled water rinse.

MOBILIZATION AND SITE ENTRY: A contamination reduction zone will be established on-site. Field work preparation, staging, and decontamination will take place in this area.

TEAM ORGANIZATION:

<u>Team Member</u>	<u>Responsibility</u>
<u>Paul Bolmer</u>	<u>Sampler</u>
<u>*Charlie Lyons</u>	<u>Team Leader</u>
<u>Vickey Miller</u>	<u>Team Leader (Groundwater Sampling)</u>
<u>*Charlie Goodwin</u>	<u>Site Safety Officer</u>
<u>*First Aid and CPR</u>	

Table A-4 lists training completed by on-site personnel.

WORK LIMITATIONS (e.g., time of day): Work will be done during daylight hours primarily. However, work may occasionally continue past sunset, only if lighting is adequate to work safely.

DISPOSAL OF WASTES:

Protective Clothing: Protective clothing will be drummed and stored on-site in an area designated by the Air National Guard until the field work is complete and the analytical results are available from the soil and water sampling. The drums will then be taken off-site and disposed of in a sanitary or secure landfill, as appropriate. It is anticipated that fewer than three drums of protective clothing will be generated.

Soil: Excess soils will be generated as a result of drilling and sampling operations. These excess soils will generally be left on the surface of the ground in the location where they are generated. However, as a safety

TABLE A-4

ON-SITE PERSONNEL TRAINING
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

TOPIC	HRS.	C. Lyons	P. Bolmer	C. Goodwin	V. Miller
INTRODUCTION/REFRESHER	4	o	o	o	o
FIRST AID	8	o	o	o	
CPR	8	o		o	
40 HOUR COURSE	40	o	o	o	o
SUPERVISORY TRAINING	8	o		o	
OVA	16	o			
PI METER	2	o	o	o	o
SCBA REVIEW	4	o	o	o	o
SAMPLING	--	o	o	o	o
HEALTH MONITORING	--	o	o	o	o

o indicates training completed

ANACHEMIA

Anachemia Chemicals Inc.

P.O. Box 783, Butternut St.
Hamplain, NY 12919

MATERIAL SAFETY DATA SHEET (Adapted from USDL form LSD-005-4)

(518) 298-4444

SECTION I. IDENTIFICATION OF PRODUCT

CHEMICAL NAME

Ethyl Alcohol (Denatured)

FORMULA

SYNONYM OR CROSS REFERENCE

AC-4098,4099

SECTION II. HAZARDOUS INGREDIENTS

MATERIAL ethyl alcohol 92.5%

Methanol 4.5%, MIBK 1%, ethyl

acetate 1%, aviation gasoline 1%

NATURE OF HAZARD

Flammable

Flammable, poison

SECTION III. PHYSICAL DATA

BOILING POINT

76°C

MELTING POINT

-114°C

VAPOR PRESSURE(mm Hg)

45

SPECIFIC GRAVITY

0.79

(VAPOR DENSITY (AIR = 1)

1.6

PERCENT VOLATILE BY VOLUME (%) 100%

WATER SOLUBILITY

complete

EVAPORATION RATE

(ether = 1) greater than 1

APPEARANCE

Colorless liquid

SECTION IV. FIRE AND EXPOSURE HAZARD DATA

FLASH POINT (method used)

60°F

FLAMMABLE LIMITS

Uel

Lel

19

3.3

EXTINGUISHING MEDIA

CO₂, dry chemical, alcohol foam

SPECIAL FIRE-FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

SECTION V. HEALTH HAZARD

THRESHOLD LIMIT VALUE

1900mg/M³

as per ACGIH 1983-84

HEALTH HAZARDS

Denatured alcohol is a violent poison. Avoid prolonged breathing
vapor. If taken internally can cause blindness or death.

FIRST AID PROCEDURES

If swallowed, induce vomiting immediately by giving two
lasses of water and sticking finger down throat. Have patient lie down and keep
eyes covered. For eyes, flush with water. Get medical attention.

See Disclaimer on reverse side.

precaution, soils that cause an organic vapor reading of 5 ppm or more above background when monitored with a PI meter will be placed in 55-gallon drums. These drums will be placed on the FTA hardstand. At the conclusion of the field investigation program, these soils will be covered with 6 inches of native clean sand to reduce the chance of exposure to the waste soils.

Water: Water generated during drilling, sampling, and decontamination activities will be poured on the ground and allowed to percolate into the soils where it originated.

E. EMERGENCY INFORMATION

LOCAL RESOURCES

Ambulance 728-3400

Central Suffolk Hospital Emergency Room 548-6026

Poison Control Center 542-2323

Police 548-3200 (Suffolk County Sheriff), 728-3400 (South Hampton Town)

Fire Department Base 233 (for emergency)

EMERGENCY CONTACTS

1. Dr. Frank Lawrence/Envirologic Data. (207) 871-2617
2. Bruce Campbell, RPh. (207) 871-2449
3. Maine Poison Control Center. (207) 871-2950
4. E.C. Jordan Co. (Maine). (207) 775-5401
5. E.C. Jordan Co. (Florida). (904) 656-1293
6. E.C. Jordan Co. (Detroit). (313) 569-3955
7. Executive Health Examiners (Marcia Taylor) (212) 326-7827
8. USEPA Emergency Response (800) 424-8802
9. Air National Guard (Major Harris). (516) 288-4200
10. Suffolk County Airport (Mr. LaTrenta). (516) 288-3600

F. EMERGENCY ROUTES

DIRECTIONS TO HOSPITAL: Exit site, turn right onto Old Riverhead Road (County Route 31). Go North on Old Riverhead Road to junction with County Route 104. Turn left on 104 (North). Follow 104 into downtown Riverhead. Turn right on Main Street (NYS Route 25). Make an immediate left onto Roanoke Avenue (County Route 73 North). Follow Roanoke Avenue to traffic circle. Hospital is on northeast side of circle.

SECTION VI. REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

INCOMPATIBILITY (material to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS
POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII. SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Absorb on vermiculite. Scoop up and place in a suitable container.

WASTE DISPOSAL METHOD

DISPOSE OF BY MEANS AS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS
OR CONTACT AN APPROVED AND LICENSED DISPOSAL AGENCY.

SECTION VIII. PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)

Face mask with organic vapor canister.

VENTILATION

LOCAL

acceptable

SPECIAL

MECHANICAL (general)
acceptable

OTHER

PROTECTIVE GLOVES

rubber

EYE PROTECTION

safety glasses

OTHER PROTECTIVE EQUIPMENT

SECTION IX. HANDLING AND STORAGE PRECAUTIONS

STORAGE AND HANDLING

SECTION X. MISCELLANEOUS INFORMATION

INFORMATION FURNISHED BY:

Thomas C. Caramia

TITLE:

Technical Services Manager

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REV. NO 0 DATE: June 1

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

Inspection

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each

citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to \$1,000 for each serious violation and for optional penalties of up to \$1,000 for each nonserious violation. Penalties of up to \$1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to \$10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than \$10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California
Seattle, Washington

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1985
OSHA 2203

TEL (202) 691-1111
Edith Brock
William E. Brock, Secretary of Labor

U.S. Department of Labor
Occupational Safety and Health Administration



APPENDIX B
QUALITY ASSURANCE PROJECT PLAN
SUMMARY

QUALITY ASSURANCE PROJECT PLAN
(QAPP)

TASK: 2-A Suffolk County Airport Fire Training Area

SUBTASKS

STANDARD PROTOCOL SELECTED

Soil Sampling During Drilling
Drilling and Installation Wells

QAPP (Section 6.5.2)
will be described in
Standard Specifications in
Driller Subcontract

Groundwater Sampling (see Table B-1)

QAPP (Section 6.6.2)

TASK ORGANIZATION

NAME

FUNCTION

C. Lyons
P. Bolmer
V. Miller
C. Goodwin

Team Leader
Safety Officer
Sampling Chief
Sampler

SUBCONTRACTORS

FUNCTION

Laboratory - to be selected
Driller - John Mathes & Associates

Chemical Analysis
Boring and Well Installation

CONTACTS

FUNCTION

William Owens
Major G. Harris

HAZWRAP Project Manager
DOD Point of Contact, Suffolk
County Airport Air National
Guard Base

Lt. Col. Washeleski

ANGSC Project Officer

TABLE B-1

GROUNDWATER SAMPLING PROGRAM
FIRE TRAINING AREA
SUFFOLK COUNTY AIRPORT

MONITORING WELL SAMPLES ¹	ROUND 1	ROUND 2
Existing Unsecured Wells	8	
Existing Jordan Wells	10	10
Existing Jordan Piezometers	4	4
New Jordan Wells	—	4
Total Groundwater Samples	22	18
Field Duplicates ²	3	2
Sampler Blanks ³	3	2
Trip Blanks ⁴	4	4
MS/MSD ⁵	3	2
HAZWRAP ⁶	3	2
Total QA/QC Samples	16	12
Combined Total	38	30

NOTES:

¹ All samples to be analyzed for VOCs.² Field Duplicates at 10%.³ Sampler Blanks at 10%.⁴ Trip Blanks one for every day of sampling.⁵ MS/MSD at 10%.⁶ HAZWRAP at 10%.

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ANALYTICAL DATA

MATRIX/ANALYSIS

Water: VOA
Soils: VOA

METHODS TO BE UTILIZED

CLP - COP
CLP - COP

COMMENTS

Disposal of wastes and decontamination of equipment procedures are in the Health and Safety Plan.